

REMARKS

Claims 8, 10, 12-14, and 18-21 are pending in the current application. Claims 8 and 18-21 are currently amended. Claims 1-17, 9, 11, and 15-17 are canceled.

Specification

The Examiner objects to the term "inversely related" found in paragraph [0016.1], which was added to Applicants Specification by way of the February 1, 2007 Amendment, for being new matter. Though Applicants do not necessarily agree, for the purpose of furthering prosecution, paragraph [0016.1] has been removed.

Claim Rejections - 35 U.S.C. § 112

Claims 8, 10, 12-14, and 18-21 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

The Examiner asserts that use of the jitter value of 10% in claim 8 is not supported by the specification. Though Applicants do not necessarily agree, for the purpose of furthering prosecution, Applicants respectfully submit claim 8 has been amended to remove reference to the jitter value of 10%. The Examiner appears to reject claims 10, 12-14, and 18-21 for depending from claim 8. Accordingly, Applicants respectfully submit claims 8, 10, 12-14, and 18-21 meet the requirements of §112, first paragraph.

Therefore, Applicants respectfully request the rejection of claims 8, 10, 12-14, and 18-21 under 35 U.S.C. §112 be withdrawn.

Claims 18-21 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

The Examiner inquires as to the definitions of the terms "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal". As an initial matter, Applicants respectfully submit the terms "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" are well known and are discussed thoroughly in the optical disc art. Applicants are confused as to why the Examiner requires a definition of the aforementioned terms. However, for the purpose of clarity, Applicants again provide the following explanation. With respect to the "symbol error rate" and "bit error rate", generally, an error rate is the ratio of the number of bits, elements, characters, or blocks incorrectly received to the total number of bits, elements, characters, or blocks sent during a specified time interval. Thus, the symbol error rate for a given set of symbols may be defined as the number of erroneous symbols divided by a total number of symbols. Similarly, the bit error rate for a given set of bits may be defined as the number of erroneous bits divided by a total number of bits. With respect to "servo error signal", Applicants specification refers to the servo error signal as a focus error signal. The focus error signal represents a deviation from the focusing distance between an optical pickup and a recording medium. In most cases, the focusing error is related to a distance in a vertical direction. With respect to the "tracking error signal", to reproduce a signal from a recording medium, a pickup should find a designated track. In the optical disc, the track is composed of groove and land, which are uneven. The pickup should be located on one of the land and the groove. Deviation from a designated track is represented using tracking error signal. Applicants respectfully submit that a "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" may be used in a similar manner to that of a jitter value to determine whether a disc is normal or deficient.

The Examiner inquires as to how the "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" are used to determine deficiency.

Accordingly, claims 18 and 21 have been amended to clarify that the “symbol error rate”, “bit error rate”, “servo error signal”, and “tracking error signal” are each compared to reference values in order to determine deficiency. The Examiner inquires as to how the “symbol error rate”, “bit error rate”, “servo error signal”, and “tracking error signal” are used with the jitter value. Applicants respectfully submit, as is indicated by paragraphs [0035] – [0037] of Applicants’ specification, the “symbol error rate”, “bit error rate”, “servo error signal”, and “tracking error signal” may be used optionally as additional subsidiary criteria to determine the deficiency of an optical disc.

Thus, Applicants respectfully submit that at least paragraphs [0035]-[0037] of the specification provide an enabling disclosure for claims 18-21. Accordingly, Applicants respectfully submit claims 18-21 do meet the enablement requirement under §112, first paragraph.

Therefore, for at least the reasons discussed above, Applicants respectfully request the rejections of claims 18-21, under 35 U.S.C. § 112, first paragraph be withdrawn.

Claim Rejections - 35 U.S.C. § 103

Claims 8, 10, 12-14, and 18-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayashida et al. Applicants respectfully traverse.

Applicants respectfully submit Hayashida fails to teach each of the limitations of claim 8. Claim 8 recites “applying pressure on the optical disc using a scratching unit while the optical disc rotates **for up to five rotation turns**”. Hayashida fails to teach this limitation. Applicants note Hayashida discloses using 0-500 turns. However, Hayashida does not disclose limiting the number of turns to 5. Specifically,

Hayashida has no reason to limit a number of turns to 5. The subject matter of claim 8 is directed to providing a method for testing an optical disc by producing scratches similar to those produced in everyday usage (Applicants' originally filed specification: [0036]). Applicants respectfully submit, in everyday usage, minute scratches can cause serious errors during reproduction or recording with an optical disc. If an optical disc includes a noticeable scratch, a person skilled in the art would not use such an optical disc. However, a person could miss minute scratches on the surface of the optical disc. Accordingly, a test for a minute scratch on the optical disc is desirable. For this reason, the subject matter of claim 8 is limited in the number of rotations to five turns. However, Hayashida has no reason to limit a number of rotations to 5 turns. Accordingly, Applicants respectfully submit Hayashida does not teach "applying pressure on the optical disc using a scratching unit while the optical disc rotates **for up to five rotation turns**". Thus, Hayashida fails to teach each of the limitations in claim 8. Consequently, the Examiner cannot establish a *prima facie* case of obviousness.

Further, claim 8 recites: "wherein the optical disc is determined to be deficient if a jitter value measured from the scratched optical disc is greater than a reference value." Hayashida fails to teach this limitation. Specifically, Hayashida does not teach the step of comparing measured values to a reference value for determining whether the optical disc is deficient **after a scratch is generated** as claim 8 requires. Accordingly, Hayashida fails to teach a method that includes determining whether an optical disc is deficient, "wherein the optical disc is determined to be deficient if a jitter value measured **from the scratched optical disc** is greater than a reference value", as claim 8 recites. Thus, Hayashida fails to teach each of the limitations in claim 8. Consequently, the Examiner cannot establish a *prima facie* case of obviousness with respect to claim 8.

Applicants note paragraphs [0149] – [0155] of Hayashida teach an evaluation method that includes using a Taber abrader on a disc. Applicants further note Hayashida mentions measuring a jitter value and using reference jitter values. However, Hayashida teaches measuring the jitter value and using the reference jitter values after recording modulation signals in a groove of the disc, and **before** actually loading the discs in the abrader and abrading the discs (Hayashida: [0154]-[0155]). Accordingly, even if, *for the sake of argument*, Hayashida teaches comparing a jitter value of a disc to a reference value before abrading the disc, nothing in Hayashida teaches determining whether an optical disc is deficient, “wherein the optical disc is determined to be deficient if a jitter value measured **from the scratched optical disc** is greater than a reference value”, as claim 8 recites, at least because, if anything, the evaluation method taught by Hayashida uses reference jitter values before any scratch has been generated on the disc.

Further, Hayashida suggests that a jitter value of a disc is measured prior to applying an abrasion test to a disc to determine whether or not the disc possesses a jitter value that is satisfactory for the abrasion test (Hayashida: [0154]-[0155]). To the contrary, the subject matter of claim 8 is directed to a test apparatus which can be applied an optical disc without such conditions.

Additionally, the subject matter of claim 8 is directed to a method of “determining whether the optical disc is deficient or normal on the basis of the scratch produced on the optical disc” using a reference jitter value. Hayashida does not teach using a reference jitter value based on a scratch generated on a disc to determine whether or note the disc is acceptable. Hayashida only teaches estimating the relative quality of various types of optical discs (Hayashida: [0157]).

For at least the reasons stated above, Applicants respectfully submit the Examiner cannot establish a *prima facie* case of obviousness with respect to claim 8,

or any claims depending from claim 8, as is required to support a rejection under §103.

Further, Applicants specifically address claims 18-21. The Examiner appears to assert that claims 18-21 are obvious in light of Hayashida and Applicants' alleged statement, at the bottom of page 8 in the July 14, 2008 Response, that the limitations of claims 18-21 are well known in the art. Applicants respectfully disagree with the Examiner's interpretation of the statements made in the July 14, 2008 Response. Applicants respectfully submit Applicants simply stated that the terms "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" are well known in the art. Applicants did not state that the manner of using the "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" claimed in claims 18-21 was well known in the art. As Applicants alleged admission with respect to claims 18-21 appears to be the sole basis of the Examiner's conclusion that claims 18-21 are obvious in light of Hayashida, Applicants respectfully submit, the Examiner has not established a *prima facie* case of obviousness with respect to any of claims 18-21 as is required to support a rejection under §103.

Therefore, Applicants respectfully request the rejection of claims 8, 10, 12-14, and 18-21 under 35 U.S.C. § 103 be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 8, 10, 12-14, and 18-21 in connection with the present application is earnestly solicited.

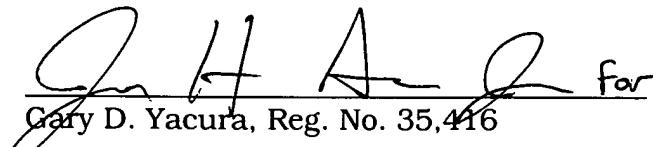
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By


Gary D. Yacura, Reg. No. 35,416

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

REG: 64,371

GDY/JHA: tlt